DOCUMENT RESUME

ED 362 907 CS 508 336

AUTHOR Assante, Leonard E.; Schrader, Stuart M.
TITLE The Implementation, Promotion and Evaluation of the International Health Communication Hotline as a Tool for Interdisciplinary Networking and Disciplinary Advocacy.
PUB DATE Apr 93
NOTE 25p.; Paper presented at the Annual Meeting of the Eastern Communication Association (New Haven, CT, April 28-May 2, 1993).
PUB TYPE Speeches/Conference Papers (150) -- Reports - Descriptive (141)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS *Communication (Thought Transfer); Communication Research; Computer Networks; Content Analysis; *Health Education; Higher Education; *Information Networks; Intellectual Disciplines; International Programs; Program Descriptions; Program Evaluation
IDENTIFIERS Health Communication; *International Health Communication Hotline

ABSTRACT

The International Health Communication Hotline (InHealth) represents an attempt to firmly establish, develop and promote a new Communication Studies subdiscipline in the academic and health care arenas via computer networking. If successful, the project will demonstrate the power of computer networking as an agent of change. Health communication may gain credibility among its critics if a clearer conceptual framework emerges and positive outcome studies can be readily documented. Conventional networking represents an ineffective means of expediting the growth of the health communication subfield within academia. Electronic or computer-aided networking offers an alternative to conventional formats that can easily cross disciplinary, national, and pedagogical boundaries. The InHealth Hotline is offered as a "Comserve" hotline. The mission of InHealth is to provide an international and interdisciplinary forum for the dissemination of information relating to research, scholarship, education and training in health communication studies. The hotline staff use several methods to promote the service within the field of communication. Three customer service evaluation programs have begun. Survey results indicate that interests and affiliations of InHealth members span the spectrum of communication studies. Preliminary content analyses indicated that the scope of topics on InHealth includes computer use and educational efforts. Future trends include: continuing promotion efforts, special topics conferences, increased database storage, increased interaction among members, and newsletter growth. (Sample promotional literature is appended as well as a brief membership survey form and two data tables of survey results. Contains 31 references.) (RS)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED 362 907

THE IMPLEMENTATION, PROMOTION AND EVALUATION OF THE INTERNATIONAL HEALTH COMMUNICATION HOTLINE AS A TOOL FOR INTERDISCIPLINARY NETWORKING AND DISCIPLINARY ADVOCACY

Leonard E. Assante
Department of Communication
University of Scranton
Scranton, PA 18510-4592
(717) 941-6333
E-Mail: AssanteL1@Jaguar.UofS.Edu

and

Stuart M. Schrader
Department of Communication Studies
Bloomsburg University
Bloomsburg, PA 17815
(717) 389-4897
E-Mail: InHealth@Jaguar.UofS.Edu

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

L. Assante

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

X This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

CS508336

Presented at the 1993 annual meeting of the Eastern Communication Association, New Haven, CT.

(Running Head: Evaluation of InHealth)

ABSTRACT

The **International Health Communication Hotline** (InHealth) represents an attempt to firmly establish, develop, and promote a new Communication Studies subdiscipline in the academic and health care arenas via computer networking. If successful, our project will demonstrate the power of computer networking as an agent of change. This paper presents the rationale for the creation and subsequent evaluation of InHealth. It is our intent to show that this medium can facilitate a synergistic growth-intensive relationship among individuals from a variety of health-related disciplines throughout the world.

Note: Ken Vasko of Bloomsburg University was an author on an earlier version of this paper.

I. Introduction to Health Communication as a Discipline:

Health Communication, a sub-field of Communication Studies, is a relative newcomer to applied social science research, having been established within the past twenty years (Costello, 1975). As such, few scholars agree as to its definition. One of the earlier definitions of the field, however, is offered by Cassata (1980):

> The communication of new scientific information to scientists and [health care] practitioners; communication among members of health care teams; communication between practitioners and patients; inter and intra-agency communication in health agencies; and the transmission of health information through the mass media (Cassata, 1980).

The insight from this early definition for health communication is that all communication occurs within context and health is but one more context. In the 1990's health communication is viewed as a:

> ...study concerned with human interaction in the health care process. It is the way we seek, process and share health information. Human communication is the singularly most important tool health professionals have to provide to their clients (Kreps & Thornton, 1992, p. 2).

Furthermore, Kreps and Thornton continue:

> "Health care professional depend on their abilities to communicate effectively with their colleagues ... to perform their health care responsibilities competently. Active and accurate communication between interdependent health care professionals... enables coordination within the health care system " (Kreps & Thornton, 1992, p. 2,4).

Health within health care is not construed merely as biological disease. Health can be regarded as a state at the positive end of a continuum, an attempt to escape the negative spectrum exemplified by disease, morbidity, mortality and eventually death. Thus, health can not be considered as a mere commodity. "It most certainty is not something to be obtained by consumers from providers" (Breslow, 1990, p.12). Although, the individual is responsible for health maintenance, the solution to the problem of being sick in the modern U.S. includes individual and social responsibility (Knowles, 1977). The promotion of health, therefore, is not only the responsibility of the health community but also that of the individual and society for it includes, physical, mental, and social well-being (Ottawa Charter for Health Promotion, 1987). Given this, the goal of Health Communication is to identify and facilitate more effective communication of health issues between health consumers and

providers (Cassata, 1978).

In order to achieve this goal most effectively, some Health Communication scholars are seeking to eliminate academic parochialism by bringing together the work of a number of health-related subfields into one synergistic body of knowledge. In doing so, Health Communication faces slight resistance from disciplines including: (1) *Medical Anthropology* which is the comparative and holistic study of culture and its influence on disease and health care) (Logan & Hunt, 1978); (2) *Ethnomedicine* which is the study of human personas and/or aggregates within a specified medical context or setting) (Faberga, 1979); (3) *Medical sociology*, the study of medical economic policy, institutional structures, professionalism, physician-patient interaction (Brown & Harris, 1978); and (4) traditional medical education. Critics claim that research in health communication is deficient of its own grounded theories, instead it simply borrows from psychosocial, anthropological, sociological and other social scientific theories. (See, for example, Costello, 1977.)

There are three reasons that may help in explaining why the sub-field has experienced difficulty in establishing its credibility. First, Health Communication has of yet been unable to clearly define what constitutes a "health context." Should the health context focus primarily on traditional problems centering around biological disease or should areas of biopsychosocial importance such as mental health, family relations & holistic healing be included (Costello, 1977)? Secondly, the seemingly infinite number of phenomena studied by the overall field of communication may leave open to question the domain of inquiry of the field and its directive (Dervin & Harlock, 1976). Such question can therefore be asked of any subfield of communication. Finally, health communication is not studied from any specific social-scientific paradigm nor any specific methodological perspective but instead incorporates, among others, critical theory, scientific empirical studies, and/or interpretive/ naturalistic paradigms. Moreover, it does not focus on a particular communication level as it examines intrapersonal, interpersonal, small group, mass-media, and societal communication (Costello, 1977). This seeming lack of direction of epistemology and methodology creates within some of the traditional medical education community a view of health communication research as being non-directive and lacking in credibility due to over-eclecticism.

Given these criticisms and limitations, Health Communication researchers have set a goal to further clarify the field's conceptual framework. We suggest three principle objectives in order to obtain this goal: (1) Synthesize a body of knowledge on health communication which would include theoretical assumptions and methodological tools and integrate this knowledge into the various health contexts; (2) Place emphasis on the education of communication skills and practices within health setting to others (e.g., educate allied health professionals and Health

Communication students) centering on emerging and existing health communication perspectives; and (3) Research should be conducted using a communication message-centered perspective (as opposed to a medical anthropology or other social scientific sub health fields approach) to health communication.

Need For Academic Networks

Health Communication may gain credibility among its critics if a clearer conceptual framework emerges and positive outcome studies can be readily documented. In order to better accomplish this goal, fledgling fields such as health communication can more proactivly interact and promote themselves using effective modes of communication in order to increase visibility, synergy, and growth. There are a number of possible strategies used to promote awareness of a new academic area: publishing scholarly journal articles, publishing a journal specific to the field or sub-field, constructing and effectively teaching relevant graduate and undergraduate courses in the new area, and the establishment of special interest groups within scholarly associations. Special interest groups or caucuses represent the bottom rung of this academic ladder. A caucus conducts meetings at academic conferences to promote awareness of the field, draws new members into its fold, and facilitates networking. Unfortunately, after initial awareness has been achieved by the special interest group, academia then often imposes a hierarchial structure in which new disciplines or sub-fields must progress upward in order to achieve status and recognition.

From the caucus level, a discipline will progress through five hierarchial levels: task force, board/committee, commission, section, and, ultimately, divisional status (Shultz, 1992). To progress upward in this hierarchy, through the various levels, a strong networking for the dissemination of information is essential. Research and publication is imperative for growth of a field but requires adequate funding. An effective network provides outlets for scholarship, and also informs researchers of the availability of grants and application procedures for potential funding sources, provides bibliographic and other database material, and disseminates updates of ongoing work in the field in order to promote synergy and innovation within the field.

Argument For Electronic Networks

Conventional networks create newsletters, panels, symposiums, through face-to-face-interaction, conventional mail or voice-mail. While necessary, these conventional means are inefficient for disseminating information on an international or even national basis. Awareness of "real-time" or "asynchronous time" developments are difficult, if not impossible using conventional modes of communication through traditional mediums.

Conventional networking thus represents an ineffective means of expediting the growth of the Health Communication subfield within academia. Exacerbating the problem of international or

national networking is the fact that Health Communication must also gain acceptance and support within the health care community in order for the subfield to apply the findings of its research and the health care community must recognize these findings as useful and relevant. This acceptance and support is imperative for Health Communication to succeed in enhancing communication within the health care system and between health care providers and the general public.

A prime example of the need for this acceptance is illustrated by examining the rapid proliferation of individuals with HIV and AIDS cases worldwide. Appropriately termed an epidemic, the number of HIV positive cases is increasing exponentially on a world-wide basis. For example, as of April 1992, there were 218,301 cases of AIDS reported in the United States alone. Until an actual cure or vaccine is developed, education remains the principle means of containing the spread of AIDS (Brown & Einsiedel, 1990). A major focus of Health Communication is research devoted to uncovering the most effective communication strategies for AIDS awareness and prevention/education campaigns. The health care system, therefore, should hopefully recognize and accept Health Communication research as being valid and relevant in order for its findings to be employed in such campaigns (Kreps & Thornton, 1992).

Other Health Communication research areas would also be of benefit to the health care delivery system if the field is accepted by the health care community as "legitimate." For example, patient compliance research, which is the study of communication patterns between the physician and patient that maximize patient compliance with physician orders (Fisher, Gandy, & Janus, 1981). Additionally, health care team or group process studies which examine the ways and means of enhancing the group dynamics of care teams (e.g., surgical teams) (Hanney, 1980). Lastly, an area of vital interest to health care professionals, is illness construction research -the study of the bio/psycho/social factors that contribute to the onset, exacerbation of, and daily living with illness (Cassel, 1974). Of further challenge to health communication researchers is the goal of achieving international acceptance of the subfield in both academia and health care delivery. AIDS, cardiovascular disease, certain addictive disorders and others, are preventable illnesses that do not recognize national boundaries. Health Communication seeks to foster international collaboration in public education campaign research and campaign implementation in order to assist in sharing the wealth of knowledge that currently exists on the topic areas mentioned above with in a global economy.

Alternative forms of networking do, fortunately exist. Electronic or computer-aided networking offers an alternative to conventional formats that can easily and efficiently cross disciplinary, national and pedagogical boundaries. It is estimated that by the end of the present decade, over 40 million

people in the United States alone will be active users of E-mail (Communication News, August, 1991). Millions more will be active internationally, and millions more will have access to E-Mail facilities via educational or organizational network structures. One of the largest existing network structures is the Internet, a collection of local, regional and "backbone" networks that connect institutions, governments, commercial organizations and military establishments. Currently the Internet connects 33 countries (Dern, 1992). (Dozens of other countries have their own networks which can connect in to the Internet via "gateways".) One of the major features of the Internet is the anonymous FTP (File Transfer Protocol) which allows individuals access to databases of information. Most larger educational institutions, including hospitals, and relevant government agencies (NSF; NIH, CDC) are connected to the Internet. Individual users can access the network usually for free through the organization they work for or study at. This, electronic networks offer a solution to link individuals across disciplines and nations.

Electronic networks may offer another advantage over conventional networking activities. Several authors suggest the possibility of reduced inhibitions by communicators when using electronic mail networks. Kim and Raja (1991) note communication phenomena such as reduced inclination to protect "face", low perceived sanction ability and self-perpetuating uninhibited interaction patterns are common on Usenet, a bulletin board system accessed through the Internet. Sproull and Kiesler (1986) also discuss the "deregulating influence on communication" of E-Mail and suggest much of the communication that occurs via (in their study) in-house electronic mail networks would not occur otherwise through more traditional communication channels.

Health communication, then, faces a complex challenge: It must not only gain acceptance, recognition, and support within the confines of academia that includes both the areas of communication and medical education, but it must also accomplish these gains within the international health delivery and public health systems. Health Communication also has a possible answer to these issues through the utilization of electronic networks as one tool of information dissemination and exchange. In an effort to meet this challenge the International Health Communication Hotline (InHealth) was established in February 1992. To best appreciate the potential benefits of this project to health communication it is first necessary to gain a conceptualization of computer networking.

Computer Networking Overview

Now that the background of Health Communication has been briefly discussed, and arguments advanced for electronic networking in this discipline, we turn to an overview of computer networking operations. To gain an understanding of the power and utility of computer networking, a brief history is in order. Sher (1986) notes that the first practical computers were used for general purpose, centralized computing. The machines were

large, consisting of a *mainframe* that housed the primary components for storing information, processing programs, and calculating. They were surrounded by peripherals for printing output, storing data files, and inputting data. Access to the system was limited to the physical confines of the central computing center. These systems required a large team of programmers, data processors, and maintenance staff and were prohibitively expensive to all but large companies and governments.

Next came *remote terminals*, access terminals located in rooms adjacent to the computing center. This innovation allowed individuals to work "on-line" independently; no longer were people required to depend entirely on the computer center staff for access to information (Stead, 1988). The advent of these terminals laid the foundation for the next phase of development.

According to Souhrada (1990), the introduction of small business computers (*miniframes*) signaled the next stage of computer development. In comparison with mainframes, these were much lower in cost and size, two key factors that made the computer a pragmatic organizational option. An additional benefit of the miniframe was its interactive capability. When access to larger data banks or faster processing speed was required, miniframes could be *interfaced*, or connected to mainframes by telephone lines, microwave links, and satellites; thus giving rise to the first computer networks.

The most recent, and perhaps most significant phase in the development of computer networking is the *personal computer* (PC). The PC is a stand-alone general purpose computer whose memory storage, data-processing speed, and software capability rivals, if not exceeds, that of the first mainframes. When combined with a *modem*, a device that enables data to be transmitted and received through telephone lines, an individual has the power to communicate with another PC, mini, or mainframe computer anywhere in the world in *real-time* (with little or no time lag) (Souhrada, 1990).

To apply the power of this communication tool for use in academia, business, medicine and governmental agencies; *databases* and *hotlines* were developed. Database services are dedicated mini or mainframe computers that store files and programs relevant to various academic and professional areas. Database services include general bibliographic resource lists, conference announcements, electronic newsletters, job announcements, grant and fellowship resources, instructional materials and other special postings (Powillis, 1988). Of relevance to the communication discipline is a database called "*Comserve*."

Comserve offers all of the previously mentioned database features and does so 24 hours a day, 365 days a year. Currently, Comserve offers over 25 different sub-field topic areas, has over 25,000 total users and has processed hundreds of thousands of requests (Steven & Harrison, 1992). One Comserve service is the set of hotlines devoted exclusively to various Communication subdisciplines. The InHealth hotline is offered currently as a

Comserve hotline.

A hotline such as InHealth is a "list" of individuals with a common interest in the topic of the list. Through the hotline, subscribers can talk to others electronically via an electronic message service (E-Mail), participate in on-line forums, or merely browse for news pertaining to the topic. The hotline software compiles a list of names and electronic addresses of all members of that hotline. Whenever a user sends a message to the central hotline computer, the software automatically distributes that message to all users on the list. Once users learn each other's electronic addresses, conversations can become more private. Requests for files or information can also be handled by special software or by hotline editors.

There are hotlines covering almost every imaginable topic including such diverse topics as and disaster research. On Comserve, communication-related hotlines available include Family communication, Intercultural Communication, Organizational Communication, and, of course, International Health Communication (Steven & Harrison, 1992).

There are a number of additional services offered by Comserve to all of its users. For example, *announce directories* are groups of files that contain files for papers, conference announcements, grant proposals, fellowships, and position announcements. *Biblio directories* are catalogs of files that contain bibliographies devoted to specific communication theories and research. *Computer directories* presents files that contain computer programs and documentation relevant to various computer operating systems and networks (Steven & Harrison, 1992). Comserve also puts out an electronic newsletter, lists of new books in communication studies, and provides other services.

The International Health Communication Hotline (InHealth) is located within the Comserve database and can be accessed via international Internet or Bitnet carrier networks from almost anywhere in the world. To access InHealth, or any other hotline, an individual would first need access to a mini or mainframe computer connected to an electronic network such as Internet. Computer access is usually via a modem-equipped PC or through a remote terminal. Once logged on to the computer, he/she would next gain access to a particular network system such as Internet. These carriers allow the individual to access databases located on computers situated throughout the world. Most nations have at least one connection to electronic networks via computers owned by universities or governments. Once the individual has logged on, remote access to a database or sending a message to a hotline is possible. In seconds, a researcher can be networking via electronic mail with colleagues in Paris, Moscow, Australia, or next door.

Mission of the InHealth Hotline

The mission of InHealth is to provide an international and interdisciplinary forum for the dissemination of information relating to research, scholarship, education and training in

health communication studies. InHealth is designed to offer an inexpensive and simple way for scholars, researchers, educators and students of health communication to network, exchange information and access a database of relevant information. This service should provide individuals interested in communication and health a variety of tools to assist in their personal and professional development.

In order to accomplish this, to offer the user the best possible service and most timely information, the owners or editors of the list must be proactive. Many hotlines are merely automatic message forwarding and storage systems, offering no other services. This places their utility at the mercy of the users. If the users are not proactive, and desire only to scan the list, the opportunity for useful interaction is diminished greatly. On the other hand, dedicated hotline editors have the potential to perform tasks such as posting information and messages to the hotlines, maintaining a database of information and seeking out information to be posted on the list. Such editors increase the utility of the hotline, thus providing a significant service. This goal of service to the community is the heart of Inhealth's mission.

Promotion of InHealth

A further example of what hotline editors can do to increase the utility of the service is to promote the hotline. Promotion provides a way to get the message out to the intended audience about the hotline. The more users a hotline has, the better the chance for productive communication to occur. With that in mind, the hotline staff use several methods to promote the service within the field of communication to gain subscribers. First, the service is being advertised on the Comserve system. When a user first logs onto Comserve he/she is provided with a list of general announcements. It is within this list that the availability of the hotline services are mentioned. When InHealth was first started, a special announcement was sent to all Comserve users. Second, the availability of the service has been advertised in SPECTRA, the Speech Communication Association newsletter, the International Communication Association newsletter, the Eastern Communication Association newsletter, and several state-level newsletters. The Chronicle of Higher Education also ran a small story on InHealth. Finally, the hotline is being promoted at communication conferences through detailed presentations by the editors on the functions, utilities, and usefulness of the service. Flyers and other literature are distributed at conventions as well (Sample literature appears in Appendix B). This promotional strategy has been successful thus far, enabling the service to gain approximately 100 subscribers within the hotline's six to seven

months of operation.[1]

To promote the service to the health care community, the hotline personnel have employed several different strategies. First, the hotline has been advertised on several health-related hotlines. Examples include HSPNET-L (Hospital Computer Network Discussion Group), Fam-Med (Family Medicine Newsgroup), and Canchid, (a Canadian health-related list). Advertising InHealth in this way has helped to create an interdisciplinary forum as several physicians, government agency workers and other health care providers have joined. Secondly, the hotline is creating a mass-mailing to every U.S. medical school. This mailing is scheduled to go out in late 1992.

Finally, the hotline editors attend, present papers and promote InHealth at health-related conventions. In June 1992, the editors presented a seminar and distributed literature on InHealth at the Health Sciences Communications Association in Washington, DC and in October, 1992 presented a videotape discussion and simulation of InHealth at the Information Technology and Community Health conference in British Columbia, Canada. These conferences are attended not only by Health Communication researchers but are also attended by physicians, nurses, health care administrators, other allied health care professionals, government health agency employees, and students.

To summarize, word-of-mouth promotion by list users is not enough to ensure the full utility of Inhealth. By actively promoting the service via electronic messages to other hotlines, by attending conferences of potentially interested scholars and by conducting mass-mailings and through other means, InHealth hopes to attract the quantity and quality of users who will benefit from a health communication network.

Evaluation Process

The combined efforts of promotion by attending conferences presenting papers and mass-mailings have enabled the service to gain exposure not only within the field of Communication, but also within the medical community. The hotline is slowly becoming an international network for health care professionals interested in the subfield of Health Communication. InHealth members are divided between communication and health disciplines and come from 6 different nations across the globe. The various users from the following countries are represented: the U.S., Canada, Greece, Hong Kong, Australia, and various regions of the European Community.

The quantity of hotline traffic sent to and received from InHealth has increased as user numbers have increased. The editors, through contacts made at conventions, through membership in other hotlines, and through our scholarship activities, have

---

[1]. Note: Much of this promotion has occurred after the end of the Spring, 1992 semester in the US. During the summer vacation, hotline traffic and E-Mail utilization drops abruptly since faculty and students are not at school. This indicates it is possible that the full fruits of promotional efforts will not be realized until the Fall, 1992 semester.

been able to post a steady stream of announcements to Inhealth. To better serve these current and future subscribers, three customer service evaluation programs have recently begun. First, an application surveys is distributed at time of initial inquiry to determine why people want to join and what they expect from the hotline. The second evaluation program consists of a content analysis of messages. Finally, a projection of future trends of what InHealth should doing has been developed based on comments from members.

Application Survey Data:

The survey results generally indicate that the interests and affiliations of Inhealth members span the spectrum of communication studies and allied health professions that the editors seek (See Appendix C for tables of these results). At least ten distinct fields are represented by Inhealth members. Table 1 indicates the most prevalent professions/affiliations. It is significant that only 26% of respondents were affiliated with communication studies departments. On the other hand, communication studies professionals made up nearly half or more of the individuals with the most prevalent interests, including 100% of individuals who expressed interest in practitioner-client communication. We can speculate, based on these results, that a) individuals outside of communication have a wide variety of interests and b) interest in practitioner-client communication is still focussed in communication studies. The data will be periodically reviewed in the future to note demographic changes in the population of InHealth users.

Content Analysis of Hotline Traffic:

Rudimentary content analysis was conducted on the first two months of hotline traffic. All messages are stored by the Comserve computer and can be retrieved by any interested user. By running the text of these messages through software designed to evaluate text for grammar and content statistics, certain conclusions may be drawn.[2] Prevalent topics can be discovered by noting word frequencies. By noting the content words that occur most frequently, the most prevalent health communication themes can be discovered. (A table of common words can be found in Appendix D. The table represents the fifteen most common content words found in the subject text or header of InHealth postings.) While this data is only exploratory in nature, it does show a wide subject area. For example, the word "health" appropriately appears 240 times, while the word "education" appears 54 times and the word "computer" 74 times. This frequency indicates that the scope of topics on InHealth includes computer use and educational efforts. However, in the future, by examining the closeness of word frequencies (is the word "educational" in the same phrase as "health") we should be able to further analyze whether or not communication is being

[2] Future analysis can be much more in depth by utilizing ethnographic analysis software. The results of this form of ethnographic discourse analysis is forthcoming.

considered as a primary concern in discussions about health issues. Analysis will also be able to discern common phrases and will include the full text of messages. This data shows that such evaluations are possible, and can hopefully indicate to hotline editors what areas to pursue for the benefit of users. Finally, traditional methods of textual analysis can be used on hotline text messages.

Future Trends:

Based on the preliminary findings of the above exploratory analysis and based on the experience of the first year, it is possible to predict the direction of Inhealth in the coming months and years. It should be noted that changes or enhancements to the InHealth system are a result of the ability of the editors to proactivly adopt the hotline to the needs and interests of the user community. This would not be possible in a more typical, passive, or non-edited hotline.

Continuing Promotion Efforts: The editors will continue to foster membership growth by promoting the hotline to relevant academic and professional audiences. This can be done by continuing the mass-mailing effort to medical schools outside of the United States, to governmental health related agencies in the U.S. and abroad, to health care practitioners, to hospital communication personnel, and to health communication students and scholars. To continue to do this, Inhealth needs to secure appropriate funding for the costs of stationary, postage and student assistants. Promotion can also be continued by face-to-face interaction among hotline users at relevant conferences, through the hotline newsletter and by postings on other hotlines that serve potentially interested audiences.

Special Topics Conferences. A long term goal of InHealth is to eventually provide a conventional scholarly meeting - an InHealth convention. The InHealth Convention would allow subscribers of the hotline to physically meet in one central locale during an annual working group meeting, with a group process oriented format. Until that is possible, Inhealth can support an electronic version of the above mentioned meeting. During the coming year, the Editor's will sponsor the first special topics electronic conference by InHealth, an electronic gathering of InHealth members who share an interest in a pre-determined topic related to the InHealth mission. A possible topic for the first conference is "AIDS education for the 90's: What happens if they find a cure?" This is the primary special interest of our users. This electronic conference will allow in-depth discussion of a specific topic of interest to select users. It is possible to publish the proceedings of the conference on-line and/or in paper form.

Increased Database Storage: To be of service to a wide variety of users, InHealth must continue to procure, create and maintain its database. Currently available are materials such as bibliographies, syllabi, other course material, instructions for access to electronic services, and archived electronic newsletters from other services. Inhealth must expand this

database to meet the interests of our members. This includes enhancing current offerings as well as offering new materials such as a file of conference announcements, funding deadlines and requests For proposals. Finally, negotiations have recently been completed that will allow publication and storage of abstracts of articles from the journal **Health Communication** on the InHealth database.

Increased Interaction Among Members: While Inhealth users are increasing in number, many of them do not seem to be active message posters. Rather, they use the information and services the editors provide. The usefulness of InHealth as a networking tool could be increased if the members are more active in posting material to the hotline. The hotline is only what users make of it, however, and the editors have little control except to encourage participation by members.

Newsletter Growth. The *InHealth HardCopy* newsletter is distributed via conventional post to all registered InHealth members. It contains both replications of important postings to InHealth as well as feature articles such as interviews and paper abstracts. Some users have found this medium to be a useful companion to the hotline, and would like it to grow in size and scope. The editors agree, but again the constraints of time and funding limit what can be done. If a secure source of funding can be located, *InHealth HardCopy* can expand.

Conclusion

The fact that the hotline has enabled international collaboration between and among subscribers is testimony to the power of computer networking. Long term efficacy of the program remains to be seen, but based on all preliminary indications from evaluation programs, the service has proven it can be successful in assisting in achieving the goal of increasing interdisciplinary and international networking in Health Communication. Efforts outlined above to meet the challenges imposed by the creation of new sub-field will hopefully create a valuable resource in the field.

APPENDIX A:
Sample Promotional Literature for InHealth

ANNOUNCING

"The International Health Communication Hotline"

A Service For:

- Health Communication Scholars and Students
- Medical Students
- Allied Health Professionals
- An International Audience

Featuring:

- Electronic Mail Message Service and special On-Line Conferences (Topics TBA)
- Bibliographic and Resource Database, Membership Directory
- Quarterly "*InHealth HardCopy*" newsletter
- Over one hundred participants and growing
- "Edited Mode" for better service and more information
- Access to thousands of scholars and hundreds of files through COMSERVE.

Brought To You By:

COMSERVE/The Communication Institute For On-Line Scholarship

The University of Scranton

Bloomsburg University

Editors:

Stuart Schrader
Department of Communication Studies
Bloomsburg University
Bloomsburg, PA 17815

Leonard Assante
Department of Communication
The University of Scranton
Scranton, PA 18510-4592

E-Mail: **InHealth@RpiEcs or InHealth@Vm.Ecs.RPI.Edu**
Editor's Mail (info): **InHealth@Scranton or InHealth@Jaguar.UofS.Edu**

Thank you for your interest in the **International Health Communication Hotline (InHealth)**, a service supported by the Communication Institute for Online Scholarship, The University of Scranton, and Bloomsburg University. The moderators for InHealth are Stuart Schrader of the Communication Studies Department at Bloomsburg University and Len Assante of the Department of Communication at The University of Scranton.

Send all messages to be posted to all users of InHealth to: InHealth@Rpiecs (Bitnet) or InHealth@Vm.Ecs.Rpi.Edu (Internet/SMTP).

Please direct all questions about the hotline to the "Editor's Mailbox" at InHealth@Scranton (Bitnet) or InHealth@Jaguar.UofS.Edu (Internet/SMTP).

To join **InHealth**, you need to do two simple things:

1) Send the following message to COMSERVE@RPIECS: Join Inhealth Your Name
For example: Join InHealth Len Assante

2) Fill out the enclosed application survey

The first step places your E-Mail address on InHealth's "mailing list" located on the computer at RPIECS. This allows you to send and receive messages to/from InHealth users. We have also provided a brief "application" form to fill out and return. This form provides us with some information to keep our database of users up to date. We will use this data to maintain a mailing list for our quarterly newsletter, and to publish, in time, a directory of users. Only those individuals that fill out and return the application form will receive the newsletter and member directory and will be able to access advanced InHealth features. You may be thinking that this is not the usual listserver-type hotline; if so, you're right. We propose to provide more than a "board" to post messages of interest to users, although that is one of our primary functions. We envision a service that provides individuals interested in communication and health a variety of tools to assist in their personal and professional development. For instance, we will soon be offering a user-accessible database of materials that will include course syllabi, conference announcements, information about funding opportunities, and pertinent bibliographies. These services will become available over the next several months, and be expanded as needed. Route all

requests for such material to the editor's mailbox, and we will do the rest.

InHealth is designed to provide an interdisciplinary and international flavor to traditional hotlines. We are inviting individuals and organizations from around the world and across the curriculum who share an interest in health and communication issues to join us. It's free, easy, and useful. Stay tuned for more information and welcome to InHealth!

Stuart Schrader
Dept. of Communication Studies
Bloomsburg University

Len Assante
Department of Communication
The University of Scranton

THE INTERNATIONAL HEALTH COMMUNICATION HOTLINE

Membership Survey

Please "fill out" this form by sending an electronic mail message containing this information to the InHealth editors at: InHealth@Scranton (Bitnet) or InHealth@Jaguar.UofS.Edu (Internet/SMTP). You DO NOT need to fill out this exact form as it appears here. (You may also mail this form to InHealth at the address listed below.)

This information will be used to create a database of members and to create a membership directory. Please indicate if you DO NOT wish to have this information made available on our directory of users. Thanks for your time and enjoy InHealth!

Name:_____
Electronic Address:_____
Mailing Address:_____
_____
Affiliation: (Dept, School, Orgzn, etc.)_____
_____
Research/Professional Interests:_____
_____
Work Phone #:_____
What Can InHealth Do For You?:_____
_____
Include in membership directory? (y/n)_____

Questions and completed forms may also be mailed via US Post to:

InHealth
Department of Communication
University of Scranton
Scranton, PA 18510-4592
(717) 941-4279 Voice
(717) 941-4132 FAX
InHealth@Scranton (Bitnet)
InHealth@Jaguar.UofS.Edu
(Internet)

APPENDIX B:
USER APPLICATION SURVEY RESULTS

	Variable	Range of Responses	Pct.
1.	Most Popular Interests:	1. AIDS Education/Prevention 2. Health/Nutrition Education 3. Practitioner-Client Comm. 4. Computers in Health 5. Mass Media Effects 6. Decision Support 7. Cancer/Alcohol Prevention 8. Other	14% 11% 9% 7% 5% 5% 5% 44% =100%
2.	Most Popular Professions / Academic Departments	1. Communication Studies 2. MD/Health PhD. 3. Natural Sciences 4. Other Social Science 5. Other	26% 21% 9% 8% 36% =100%
3.	Most Common Profession of Top 4 Interests	1. Communication Studies 2. Other Social Science 3. Communication Studies 4. Mixed *	50% 50% 100% n.a.

*: All respondents in this category had different affiliations.
n.a.: Not applicable

APPENDIX C:
CONTENT ANALYSIS RESULTS

MOST COMMON KEY WORDS

Word:	#: (Includes variants)
Health	240
Medical	172
Communication	92
Network	88
Research	82
Patient	76
Computer	74
Conference	71
International	62
University	56
Education	54
Social	46
Development	38
Canadian	25
Biomedical	18

(Note: Other words obviously occur with similar or greater frequency. Most of these are connectors [are, a, the, etc.] or are proper names [InHealth, Assante], or are titles, places, and other non-content-based words [Scranton, VAX, PhD, professor].)

BIBLIOGRAPHY

Brenner, M., Mooney, A., & Nagey, T. (Eds.). (1980). Assessing the contributions of the social sciences to health. Colorado: Westview Press, Inc.

Brown, J. & Eeinsiedel, E. (1990). Public health campaigns: Mass media strategies. In E. Ray, & L. Donohew (Eds.). (pp. 153-170). Communication and health: Systems and applications. NJ: Lawrence Erlbaum Associates, Publication.

Brown, G.W. & Harris, T. (1978). Social origins of depression. London: Travistock Publications.

Cassata, D.M. (1978). Health communication theory and research: An overview of the communication specialist interface. Communication Yearbook 2, New Brunswick, NJ: Transactional-International Communication Association, 582-589.

Cassata, D.M. (1980). Health communication theory and research: A definition. Communication Yearbook 4, New Brunswick, NJ: Transactional-International Communication Association, 582-589.

Cassel, J. (1974). An epidemiological perspective of psychosocial factors in disease etiology. American Journal of Public Health, 64, 1041.

Costello, D.E. (1977). Health communication theory and research: An overview. Communication Yearbook 1, New Brunswick, NJ: Transactional-International Communication Association, 555-567.

Dern, D. (Feb, 1992). Applying the internet. Byte, 17, 111-116.

Dervin, B. & Harlock, S. (1976). Health communication research: The state of the art. Paper presented at the annual convention of the International Communication Association, Portland, Oregon.

Faberga, H., (1979). Disease and illness from a biocultural standpoint. (p23-51). In P. Ahmed & Coelho (eds.). Toward a new definition of health. New York: Plenum press.

Fisher, J., Gandy, H. & Janus, N.Z. (1981). The role of popular media in defining sickness and health: In E.G. McAnany, J. Schnitman, & N. Janus (Eds.). Communication and social structure: Critical studies in mass media research. (pp 240-257). New York: Prager.

Getting a handle on the boom in e-mail use. (August, 1991).

Communication News.

Hall, S., & Hall, P. (April, 1991). Between schools: Inter-Classroom Collaboration. Paper presented at the Annual Conference on Computers and English. Old Westbury, New York.

Hanney, D.R. (1980). Problems of role identification and conflict in interdisciplinary teams. Toward team care. (pp. 3-17) London: Longman Group Limited.

HIV/AIDS Surveillance Report. (April, 1992). Center for Disease Control: Atlanta, Georgia.

Kim, Min-Sun, and Raja, Narayan, S. (1991). Verbal aggression and self-disclosure on computer bulletin boards. Paper presented at the annual meeting of the international Communication Association. Chicago, IL.

Sproull, Lee, and Kiesler, Sara. (1986). Reducing social context cues: Electronic mail in organizational communication. Management Science, 21, 1492.

Kreps, G., & Thornton, B. (Eds. 2nd). (1992). Health Communication: Theory & practice. Illinois: Waveland Press.

Logan, M.H., & Hunt, E.E. (Eds). (1978). Health and the human condition: Perspectives on medical anthropology. Mass: Duxburg Press.

Ottawa Charter for Health Promotion. (1987). Health Promotion, 1(4), iii.

Powills, S. (1988). Computers communicate with voice/data links. Hospitals, 52, 50-61.

Roberts, L. (May, 1987). The electronic seminar: Distance education by computer conferencing. Paper presented at the Annual Conference on Non-traditional and Interdisciplinary Programs. Fairfax, Virginia.

Sher, P. (1986). Knowledge-based information. Clinics in laboratory medicine, 8, 713-22.

Sproull, L., & Lee, K. (1986). Reducing social context cues: Electronic mail in organizational communication. Management Science, 32, 1492-1513.

Stead, W. W., (1988). Information management through integration of distributed resources. Bulletin of the Medical Library Association, 76, 242-7.

Steven, T., & Harrison, T. (1992). Comserve database catalog. Sage Labs: Rensselaer Polytechnic Institute, Rensselaer, NY.

Stroble, E. (April, 1988). A look at Writers' comments shared on computer screens: Can electronic mail facilitate peer group response? Paper presented at the Annual Meeting of the American Educational Research Association. New Orleans, Louisiana.

Unknown author. (1991). Getting a handle on the boom in E-mail use. Communication News, 28, 9.